

North Carolina's Innovation Performance

Key Points

- North Carolina has enjoyed a long-standing leadership position in university-led basic research.
- North Carolina has had less success in translating basic research into innovation-based economic and societal rewards.
- North Carolina's performance across a range of indicators showing its innovation performance is mixed, ranking at or below the U.S. average on a majority of factors.
- Understanding North Carolina's performance on relevant indicators requires examining not only the state as a whole and its history, but also differences across regions within the state.
- North Carolina's innovation assets and activities are geographically concentrated in metropolitan areas that are distributed broadly across the state.
- Though the degree of North Carolina's concentration is not uncommon among U.S. states, it presents a set of challenges and opportunities on which to focus an enhanced innovation framework that recognizes, respects, and builds upon regional differences.

Traditional Innovation-Based Economic Development

The traditional view of innovation-based economic development assumes that building “basic” (or “fundamental” or “pure”) research capacity automatically, and almost magically, leads to economic growth and prosperity.²³ This view was popularized by the first presidential science advisor, Vannevar Bush, appointed in 1939 by President Roosevelt and largely credited as the architect of the federal government's role in scientific research after World War II. He advanced the idea that “as long as scientists are free to pursue the truth wherever it may lead, there will be a flow of new scientific knowledge to those who can apply it to practical problems.”²⁴

The federal government has largely followed this linear model for the past 60 years in distributing science and technology funding toward basic research (Figure 2.1).

Conventional wisdom has said that increased basic research capacity will lead automatically to economic growth.

Figure 2.1 Traditional View of Government's Role in the Innovation Economy

